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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/613,492	07/02/2003	Kazuo Kobayashi	50649/DBP/A400	4427

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EXAMINER

GRAY, LINDA L

ART UNIT	PAPER NUMBER
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1734

DATE MAILED: 03/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

10/613,492

Applicant(s)

KOBAYASHI, KAZUO

Examiner

Linda L Gray

Art Unit

1734

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 7-2-03, 4-26-04, 12-14-04, and 1-3-05.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) 5-11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4/26/04; 12/14/04
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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Detailed Action

Election/Restriction

1. Applicant's election without traverse of claims 1-4 in the reply filed on 1-3-05 is acknowledged. Claims 5-11 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Drawings

2. Figures 1A and 1B should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.121(d)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the application regards as his invention.

4. **Claims 3-4 are rejected under 5 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

Claims 3-4 are indefinite in that such indicate applying the tapes over the protective tape (i.e., a protective tape is applied to the surface of the wafer, to which the dicing tape is to be applied) and then removing the protective tape because such will also remove the dicing tapes which is not intended when one reads the specification. Also, the antecedent of "the dicing tape" is unclear in that does such refer to the non-cut tape or pre-cut tape?

Claim Rejections - 35 USC 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jeong et al. (US 2004/0009650 A1).

Claim 1, Jeong et al. teach a dicing tape applying apparatus (Figure 7) applying dicing tape 30 and 40 to wafer 150. The apparatus includes stage 128 retaining wafer 150, a dicing tape supply mechanism (supporter for 122, 124, 138, etc, see Figure 7) able to set both non-cut dicing tape 30 and pre-cut dicing tape 40 and supplying set tape 30 or 40, and an applying apparatus (including roller 130) applying tape 30 or tape 40 supplied from the dicing tape supply mechanism to the back of wafer 150. Jeong et al. also teach cutter 135 cutting tape 30 into a desired shape when tape 30 is applied (p 4, paras 54-60).

Claim 1, Jeong et al. do not teach a pre-cut dicing tape edge position detector detecting the edge position of tape 40 when tape 40 is applied from the dicing tape supply mechanism.

Applicant's admitted prior art teaches using a pre-cut dicing tape edge position detector detecting the edge position of a pre-cut dicing tape when the tape is applied by a dicing tape supply mechanism to ensure correct alignment of the tape and the wafer (p 2, L 16-29, pending specification).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have provided in Jeong et al. a pre-cut dicing tape edge position detector detecting the edge position of tape 40 when tape 40 is applied from the dicing tape supply mechanism

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because Applicant's admitted prior art teaches using such to ensure correct alignment of a pre-cut tape and a wafer.

Claim 2, tapes 30 and 40 are considered dicing tapes (c 2, para 17) and die bonding tape (p 1, para 6). The limitation of "the back of the wafer is bonded to the dicing tape via the die bonding tape" refers to active method step when using the claimed apparatus and is not written as a functional step of the claimed apparatus.

Claims 3-4, the limitation of "a protective tape is applied to the surface of the wafer" and "after applying the dicing tape" refers to an active method step when using the claimed apparatus and is not written as a functional step of the claimed apparatus.

Claims 3-4, Jeong et al. do not teach a protective tape peeling mechanism for peeling a protective tape from wafer 150.

However, it is conventional in the art to provide a dicing tape applying apparatus which applies a dicing tape to a wafer with a protective tape peeling mechanism for peeling a protective tape from a wafer such that the wafer can then be sent into further processing operations where protective tapes are well-known in the art for preventing dust and other particles from contacting the wafer, and for this reason it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have provided for such in Jeong et al.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Linda Gray whose telephone number is (571) 272-1228. The examiner can normally be reached Monday-Friday from 9:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Fiorilla, can be reached at (571) 272-1187. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public Pair. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-1997 (toll-free).

llg

March 21, 2008


LINDA GRAY
PRIMARY EXAMINER